

**REMARKS**

Claims 1, 3, 5 to 7 and 12 are pending in the application. Claims 2, 4, 8 to 11 and 13 have been cancelled.

*Specification*

The specification has been amended, as per the Examiner's suggestion, to introduce a cross-reference to related applications.

*Claim objections*

The term "cell recruitment" has been corrected in claim 3, the term "therapeutically affective amount" has been removed from claim 12, and claim 10 has been cancelled, thereby rendering the objections moot.

*Claim Rejection – 35 USC § 101*

Claim 13 has been cancelled thereby rendering the rejection moot.

*Claim Rejection – 35 USC § 112*

Claims 1 and 9 have been rejected under 35 USC § 112, first paragraph. In response, claim 1 has been amended to refer to "an antibody" and claim 9 has been cancelled thereby rendering the rejection moot.

Claims 1 to 13 have been rejected under 35 USC § 112, second paragraph. In response, the term "effective amount" has been removed from claims 1 and 12 and the term "administering" has been amended in claim 1. Further, and for purposes of clarity, claims 1 and 12 have been amended to read "for inhibiting the recruitment or the activation of neutrophils". This amendment is supported in original claims 2 to 4. Consequently, claims 2 and 4 have been cancelled. Claims 1 and 12 have been further amended to read "an antibody against a S100A8 or S100A9 protein". This amendment is supported in original claims 8 to 11. Consequently, claims 8 to 11 have been cancelled. Applicant respectfully submits that the amended claims are compliant with 35 USC § 112, second paragraph and requests that the rejection be withdrawn.

*Claim Rejection – 35 USC § 102*

Claims 1 to 13 have been rejected under 35 USC § 102(b) as being allegedly anticipated by Geczy et al. Applicant respectfully disagrees. First, Applicant respectfully submits that the state of the art is ambiguous with respect to the relationship between human S100A8 and murine CP-10/S100A8. Although Rouleau et al. (Clin. Immunol. 107: 46-54) indicates that CP-10 is a murine homolog of human S100A8, other documents in the art suggest otherwise. For example, murine CP-10 and murine S100A8 have been considered as two independent entities by Rosario Donato “although the cDNA sequence of murine CP-10 is identical to that of murine S100A8 and both proteins have been associated with inflammation, several differences were reported concerning the biological activity of the two proteins. Thus CP-10 is being referred as the S100A8-like CP-10 protein...” (Biochim. Biophys. Acta 1999: 1450 pp.191-231, copy of which is enclosed for the Examiner's convenience). In addition, Carolyn Geczy, one of the inventors of U.S. patent 5,731,166, recently published an article in which she claims that “structure-function analysis of the chemotactic properties of murine S100A8 and human S100A12, particularly within the active regions of human S100A12 and murine S100A8 support the possibility that mouse CP-10 is the homolog of human S100A12” (Ravasi et al., Genomics 2004: 84, pp. 10-22, a copy of which is enclosed for the Examiner's convenience). In the same document, Geczy also indicates that the hinge region of murine CP-10 is involved in its chemotactic activity, much like the hinge region of S100A12. Further, it has been shown in the art that the hinge region of human S100A8 has no chemotactic activity. As such, a person skilled in the art in light of Geczy would understand that it describes the modulation of inflammatory responses using inhibitors of murine CP-10 or its human homolog, S100A12, but not inhibitors of S100A8 and/or S100A9, as presently claimed. Therefore, at the time of filing, there was no consensus in the state of the art that could teach a person skilled in the art to use the inhibitors described in Geczy to achieve the same results as indicated in the present application. In addition, three years after the filing of the present application, there is still no consensus in the state of the art as to the relationship between murine CP-10 and human or murine S100A8. In light of the above, Applicant respectfully submits that the new claims as presently amended are novel in light of Geczy and requests that the rejection be withdrawn.

Claims 1 to 13 have been rejected as being allegedly anticipated by Hillman. Reconsideration by the Examiner is respectfully requested. Applicant respectfully submits that Hillman discloses S100P proteins and the use of antibodies against S100P proteins. Although S100P proteins are members of the S100 family of proteins, they are not related to either S100A8 or S100A9 (refer to Donato, cited supra). Further, there are no indication in Hillman that the teachings for the S100P proteins disclosed therein can be applied to S100A proteins. Therefore, Applicant respectfully submits that Hillman does not anticipate the claims presently on file and requests that the rejection be withdrawn.

Applicant submits that no new matter has been added by the present amendments.

It is submitted, therefore, that the claims are in condition for allowance. Reconsideration of the Examiner's rejections is respectfully requested. Allowance of claims 1, 3, 5 to 7 and 12 at an early date is solicited.

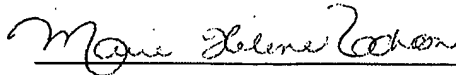
In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application may be expedited.

No additional fees are believed to be associated with the filing of this amendment. However, should this assumption be an error, the Commissioner is hereby authorized to charge the required fee to Deposit Account No. 19-5113.

Respectfully,

UNIVERSITÉ LAVAL

July 19, 2006



Marie-Hélène Rochon, Registration No. 57,566  
Agent of the Applicant

OGILVY RENAULT, LLP/S.E.N.C.R.L., s.r.l.  
1981 McGill College Ave.  
Suite 1600  
Montréal, Québec  
Canada H3A 2Y3  
Tel. : (514) 847-6095 / Fax : (514) 288-8389